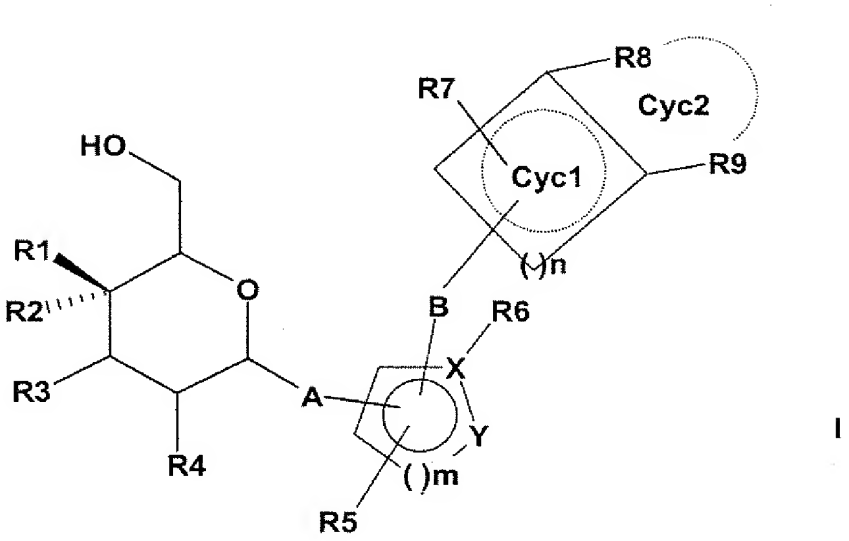
1. (currently amended) A compound of formula I



wherein

R1 and R2 are each independently F or H or one of said radicals R1 and R2 may be OH;

R3 is OH or F, with the proviso that at least one of the radicals R1, R2 and R3 must be F;

R4 is OH;

A is O~~, NH, CH_2, S or a bond~~;

X is C, O, S or N, with the proviso that X is C when Y is O or S;

Y is N, O or S;

m is 1 or 2;

R5 is hydrogen, F, Cl, Br, I, OH, CF_3, ~~NO_2, CN, COOH, $CO(C_1$-$C_6)$-alkyl, $COO(C_1$-$C_6)$-alkyl, $CONH_2$, $CONH(C_1$-$C_6)$-alkyl, $CON[(C_1$-$C_6)$-alkyl$]_2$,~~ (C_1-C_6)-alkyl, ~~(C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_6)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]** or (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl, ~~phenyl, benzyl, (C_1-C_6)-alkoxycarboxyl,~~

wherein said ~~$CO(C_1$-$C_6)$-alkyl, $COO(C_1$-$C_6)$-alkyl, $CONH(C_1$-$C_6)$-alkyl, $CON[(C_1$-$C_6)$-alkyl$]_2$,~~ (C_1-C_6)-alkyl, ~~(C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_6)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]** and (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl ~~and (C_1-C_6)-alkoxycarboxyl~~ radicals are optionally substituted with one or more fluorine atoms**[[,]]**;

~~SO_2-NH_2, $SO_2NH(C_1$-$C_6)$-alkyl, $SO_2N[(C_1$-$C_6)$-alkyl$]_2$, S-$(C_1$-$C_6)$-alkyl, S-$(CH_2)_o$-phenyl, SO-$(C_1$-$C_6)$-alkyl, SO-$(CH_2)_o$-phenyl, SO_2-$(C_1$-$C_6)$-alkyl, SO_2-$(CH_2)_o$-phenyl,~~

~~wherein said $SO_2NH(C_1$-$C_6)$-alkyl, $SO_2N[(C_1$-$C_6)$-alkyl$]_2$, S-$(C_1$-$C_6)$-alkyl, SO-$(C_1$-$C_6)$-alkyl and SO_2-$(C_1$-$C_6)$-alkyl radicals are optionally substituted with one or more fluorine atoms, and wherein the phenyl ring of said S-$(CH_2)_o$-phenyl, SO-$(CH_2)_o$-phenyl and SO_2-$(CH_2)_o$-phenyl radicals is optionally mono- or disubstituted with F, Cl, Br, OH, CF_3, NO_2, CN, OCF_3, O-$(C_1$-$C_6)$-alkyl, $(C_1$-$C_6)$-alkyl or NH_2, and wherein o is 0, 1, 2, 3, 4, 5, or 6,~~

~~NH_2, NH-$(C_1$-$C_6)$-alkyl, $N((C_1$-$C_6)$-alkyl$)_2$, $NH(C_1$-$C_7)$-acyl, phenyl or O-$(CH_2)_o$-phenyl,~~

~~wherein the phenyl ring of said phenyl and O-$(CH_2)_o$-phenyl radicals is optionally mono-, di-, or trisubstituted with F, Cl, Br, I, OH, CF_3, NO_2, CN, OCF_3, O-$(C_1$-$C_6)$-alkyl, $(C_1$-$C_6)$-alkyl, NH_2, $NH(C_1$-$C_6)$-alkyl, $N((C_1$-$C_6)$-alkyl$)_2$, SO_2-CH_3, COOH, COO-$(C_1$-$C_6)$-alkyl or $CONH_2$, and wherein o is as hereinabove defined;~~

or, when Y is S, R5 and R6 taken together with the carbon atoms to which they are attached may form a phenyl ring;

R6 is H**[[**,**]]** or $(C_1$-$C_6)$-alkyl~~, $(C_1$-$C_6)$-alkenyl, $(C_3$-$C_6)$-cycloalkyl, or phenyl wherein said phenyl radical is optionally substituted with halogen or $(C_1$-$C_4)$-alkyl~~;

B is ~~$(C_0$-$C_{15})$-alkanediyl, wherein one or more of the carbon atoms in said alkanediyl radical may be replaced, independently of one another, with -O-, -(C=O)-, -CH=CH-, -C≡C-, -S-, -CH(OH)-, -CHF-, $-CF_2$-, -(S=O)-, $-(SO_2)$-, -N($(C_1$-$C_6)$-alkyl)-, -N($(C_1$-$C_6)$-alkyl-phenyl)- or -NH-~~ $-CH_2$- or –CO-NH-CH_2-;

n is **[[**0, 1,**]]** 2**[[**,**]]** or 3 **[[**or 4**]]**;

Cyc1 is a **[[**3-, 4-,**]]** 5-**[[**,**]]** or 6- **[[**or 7-**]]**membered ~~saturated,~~ partially saturated or unsaturated ring, wherein one carbon atom of said ring may be replaced by **[[**O, N or**]]** S;

R7, R8, and R9 are each independently hydrogen, F, Cl, Br, I, OH, CF_3, ~~NO_2, CN, COOH, $COO(C_1$-$C_6)$-alkyl, $CO(C_1$-$C_4)$-alkyl, $CONH_2$, $CONH(C_1$-$C_6)$-alkyl, $CON[(C_1$-$C_6)$-alkyl$]_2$,~~ $(C_1$-$C_6)$-alkyl, ~~$(C_2$-$C_6)$-alkenyl, $(C_2$-$C_6)$-alkynyl,~~ $(C_1$-$C_8)$-alkoxy, HO-$(C_1$-$C_6)$-alkyl**[[**,**]]** or $(C_1$-$C_6)$-alkyl-O-$(C_1$-$C_6)$-alkyl,

wherein said ~~$COO(C_1$-$C_6)$-alkyl, $CO(C_1$-$C_4)$-alkyl, $CONH(C_1$-$C_6)$-alkyl, $CON[(C_1$-$C_6)$-alkyl$]_2$,~~ $(C_1$-$C_6)$-alkyl, ~~$(C_2$-$C_6)$-alkenyl, $(C_2$-$C_6)$-alkynyl,~~ $(C_1$-$C_8)$-alkoxy, HO-$(C_1$-$C_6)$-alkyl and $(C_1$-$C_6)$-alkyl-O-$(C_1$-$C_6)$-alkyl radicals are optionally substituted with one or more fluorine atoms,

~~SO_2-NH_2, $SO_2NH(C_1$-$C_6)$-alkyl, $SO_2N[(C_1$-$C_6)$-alkyl$]_2$, S-$(C_1$-$C_6)$-alkyl, S-$(CH_2)_o$-phenyl, SCF_3, SO-$(C_1$-$C_6)$-alkyl, SO-$(CH_2)_o$-phenyl, SO_2-$(C_1$-$C_6)$-alkyl, SO_2-$(CH_2)_o$-phenyl,~~

~~wherein said $SO_2NH(C_1$-$C_6)$-alkyl, $SO_2N[(C_1$-$C_6)$-alkyl$]_2$, S-$(C_1$-$C_6)$-alkyl, SO-$(C_1$-$C_6)$-alkyl and SO_2-$(C_1$-$C_6)$-alkyl radicals are optionally substituted with one or more fluorine atoms, and wherein the phenyl ring of said S-$(CH_2)_o$-phenyl, SO-$(CH_2)_o$-phenyl and SO_2-$(CH_2)_o$-phenyl radicals is optionally mono- or disubstituted with F, Cl, Br, OH, CF_3, NO_2, CN, OCF_3, O-$(C_1$-$C_6)$-alkyl, $(C_1$-$C_6)$-alkyl or NH_2, and wherein o is as hereinabove defined,~~

~~NH_2, NH-$(C_1$-$C_6)$-alkyl, $N((C_1$-$C_6)$-alkyl$)_2$, $NH(C_1$-$C_7)$-acyl, phenyl or O-$(CH_2)_o$-phenyl,~~

~~wherein the phenyl ring of said phenyl and O-$(CH_2)_o$-phenyl radicals is optionally mono-, di-, or trisubstituted with F, Cl, Br, I, OH, CF_3, NO_2, CN, OCF_3, $(C_1$-$C_8)$-alkoxy, $(C_1$-$C_6)$-alkyl, NH_2, $NH(C_1$-$C_6)$-alkyl, $N((C_1$-$C_6)$-alkyl$)_2$, SO_2-CH_3, COOH, COO-$(C_1$-$C_6)$-alkyl or $CONH_2$, and wherein o is as hereinabove defined;~~

or R8 and R9 taken together with the carbon atoms to which they are attached form a 5-**[[**,**]]** <u>or</u> 6- ~~or 7-~~ membered, ~~saturated,~~ partially saturated or completely unsaturated ring herein referred to as Cyc2,

wherein one ~~or two~~ carbon atom**[[**(s)**]]** in said Cyc2 ring **[[**are**]]** <u>is</u> optionally replaced by **[[**N,**]]** O or S, and wherein said Cyc2 ring is optionally substituted with $(C_1$-$C_6)$-alkyl, ~~$(C_2$-$C_5)$-alkenyl or $(C_2$-$C_5)$-alkynyl,~~

~~wherein said $(C_1$-$C_6)$-alkyl, $(C_2$-$C_5)$-alkenyl and $(C_2$-$C_5)$-alkynyl radicals are optionally substituted with F, Cl, OH, CF_3, NO_2, CN, $COO(C_1$-$C_4)$-alkyl, $CONH_2$, $CONH(C_1$-$C_4)$-alkyl or OCF_3,~~

and wherein a $-CH_2$- group contained in said $(C_1$-$C_6)$-alkyl, ~~$(C_2$-$C_5)$-alkenyl and $(C_2$-$C_5)$-alkynyl~~ radical**[[**s**]]** is optionally replaced by –O-;

and pharmaceutically acceptable salts thereof.

2. (currently amended) The compound of Claim 1 wherein:

R1 and R2 are each independently F or H ~~or one of said radicals R1 and R2 may be OH,~~ with the proviso that at least one of said radicals R1 and R2 is F;

R3 is OH;

R4 is OH;

A is O **[[**or NH**]]**;

X is C, O or N, with the proviso that X is C when Y is S;

Y is N or S;

m is 1 or 2;

R5 is hydrogen, F, Cl, Br, I, OH, CF_3, ~~NO_2, CN, COOH, CO(C_1-C_6) alkyl, COO(C_1-C_6) alkyl, $CONH_2$, CONH(C_1-C_6) alkyl, CON[(C_1-C_6) alkyl]$_2$,~~ (C_1-C_6)-alkyl, ~~(C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_6)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]** or (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl, ~~phenyl, benzyl or (C1-C6)-alkoxycarboxyl,~~

wherein said ~~CO(C_1-C_6) alkyl, COO(C_1-C_6) alkyl, CONH(C_1-C_6) alkyl, CON[(C_1-C_6) alkyl]$_2$,~~ (C_1-C_6)-alkyl~~, (C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_6)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]**and (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl~~, (C1-C6)-alkoxycarboxyl and SO-(C_1-C_6)-alkyl~~ radicals are optionally substituted with one or more fluorine atoms,

or when Y is S, R5 and R6 taken together with the carbon atoms to which they are attached may form a phenyl ring;

R6 is H**[[,]]** or (C_1-C_6)-alkyl~~, (C_1-C_6)-alkenyl, (C_3-C_6)-cycloalkyl, or phenyl wherein said phenyl radical is optionally substituted with halogen or (C_1-C_4)-alkyl~~;

B is ~~(C_0-C_{15})-alkanediyl, wherein one or more of the carbon atoms in said alkanediyl radical may be replaced, independently of one another, with -O-, -(C=O)-, -CH=CH-, -C≡C-, -S-, -CH(OH)-, -CHF-, -CF_2-, -(S=O)-, -(SO_2)-, -N((C_1-C_6)-alkyl)-, -N((C_1-C_6)-alkyl-phenyl)- or -NH-~~ -CH_2- or –CO-NH-CH_2-;

n is **[[**0, 1,**]]** 2**[[,]]** or 3 **[[**or 4**]]**;

Cyc1 is a **[[**3-, 4-,**]]** 5-**[[,]]** or 6- **[[**or 7**]]**-membered ~~saturated,~~ partially saturated or unsaturated ring, wherein one carbon atom of said ring may be replaced by **[[**O or**]]** S;

R7, R8, and R9 are each independently hydrogen, F, Cl, Br, I, OH, CF_3, ~~NO_2, CN, COOH, COO(C_1-C_6)-alkyl, CO(C_1-C_4)-alkyl, $CONH_2$, CONH(C_1-C_6)-alkyl, CON[(C_1-C_6)-alkyl]$_2$,~~ (C_1-C_6)-alkyl, ~~(C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_8)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]** or (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl, ~~S-(C_1-C_6)-alkyl, CF_3 or SO-(C_1-C_6)-alkyl,~~

wherein said ~~COO(C_1-C_6)-alkyl, CO(C_1-C_4)-alkyl, CONH(C_1-C_6)-alkyl, CON[(C_1-C_6)-alkyl]$_2$,~~ (C_1-C_6)-alkyl, ~~(C_2-C_6)-alkenyl, (C_2-C_6)-alkynyl,~~ (C_1-C_8)-alkoxy, HO-(C_1-C_6)-alkyl**[[,]]** and (C_1-C_6)-alkyl-O-(C_1-C_6)-alkyl~~, S-(C_1-C_6)-alkyl and SO-(C_1-C_6)-alkyl~~ radicals are optionally substituted with one or more fluorine atoms,

or R8 and R9 taken together with the carbon atoms to which they are attached form a 5-**[[**,**]]** or 6- **[[**or 7-**]]** membered~~, saturated,~~ partially saturated or completely unsaturated ring herein referred to as Cyc2,

wherein one ~~or two~~ carbon atom**[[**(s)**]]** in said Cyc2 ring is optionally replaced by **[[**N,**]]** O or S, and wherein said Cyc2 ring is optionally substituted with $(C_1\text{-}C_6)$-alkyl~~, $(C_2\text{-}C_5)$-alkenyl or $(C_2\text{-}C_5)$-alkynyl, wherein said $(C_1\text{-}C_6)$-alkyl, $(C_2\text{-}C_5)$-alkenyl and $(C_2\text{-}C_5)$-alkynyl radicals are is optionally substituted with F, Cl, OH, CF_3, NO_2, CN, $COO(C_1\text{-}C_4)$-alkyl, $CONH_2$, $CONH(C_1\text{-}C_4)$-alkyl or OCF_3,~~ and wherein a $-CH_2-$ group contained in said $(C_1\text{-}C_6)$-alkyl~~, $(C_2\text{-}C_5)$-alkenyl and $(C_2\text{-}C_5)$-alkynyl~~ radical**[[**s**]]** is optionally replaced by –O-.

3. (original) The compound of Claim 1 wherein the sugar residues are beta(β)-linked and the stereochemistry in the 2, 3 and 5 position of the sugar residue has the D-gluco configuration.

4. (currently amended) The compound of Claim 1 wherein:

R1 and R2 are each independently F or H ~~or one of said radicals R1 and R2 may be OH,~~ with the proviso that at least one of said radicals R1 and R2 is F;

R3 is OH;

R4 is OH;

A is O;

X is C, O or N, with the proviso that X is C when Y is S;

Y is N or S;

m is 1;

R5 is hydrogen, ~~F, Cl, CF_3, OCF_3, $COO(C_1\text{-}C_4)$-alkyl,~~ $(C_1\text{-}C_5)$-alkyl, ~~$(C_2\text{-}C_4)$-alkenyl, $(C_2\text{-}C_4)$-alkynyl,~~ $(C_1\text{-}C_4)$-alkoxy, HO-$(C_1\text{-}C_4)$-alkyl**[[**,**]]** or $(C_1\text{-}C_4)$-alkyl-O-$(C_1\text{-}C_4)$-alkyl~~, phenyl, benzyl, $(C_1\text{-}C_4)$-alkoxycarboxyl, OCH_2CF_3 or $(C_1\text{-}C_4)$-alkyl-CF_2-~~,

or when Y is S, R5 and R6 taken together with the carbon atoms to which they are attached may form a phenyl ring;

R6 is H**[[**,**]]** or $(C_1\text{-}C_6)$-alkyl~~, $(C_1\text{-}C_6)$-alkenyl, $(C_3\text{-}C_6)$-cycloalkyl, or phenyl wherein said phenyl radical is optionally substituted with halogen or $(C_1\text{-}C_4)$-alkyl~~;

B is ~~$(C_1\text{-}C_4)$-alkanediyl, wherein one carbon atom in said alkanediyl radical may be replaced with -O-, -(C=O)-, -CH(OH)-, -CHF-, $-CF_2$-,~~ $-CH_2-$ or -CO-NH-CH_2-;

n is 2 or 3;

Cyc1 is an unsaturated 5- or 6-membered ring, wherein one carbon atom of said ring may be replaced by **[[**O or**]]** S;

R7, R8, and R9 are each independently hydrogen, F, Cl, Br, I, OH, $(C_1\text{-}C_4)$-alkyl, OCH_2CF_3, $(C_1\text{-}C_8)$-alkoxy, HO-$(C_1\text{-}C_6)$-alkyl, $(C_1\text{-}C_4)$-alkyl-O-$(C_1\text{-}C_4)$-alkyl~~, S-$(C_1\text{-}C_4)$-alkyl, SCF_3~~ or OCF_3,

or R8 and R9 taken together form the radicals –C=CH-O-,

-CH=CH-S- or -CH=CH-CH=CH- and, with the carbon atoms to which they are attached, form an unsaturated or partially saturated 5- or 6-membered ring, said ring being optionally substituted by $(C_1\text{-}C_4)$-alkoxy ~~or –O-$(CH_2)_p$-O- wherein p is 1 or 2~~.

5. (currently amended) The compound of Claim 1 wherein:

R1 and R2 are each independently F or H,
with the proviso that at least one of said radicals R1 and R2 is F;

R3 is OH;

R4 is OH;

A is O;

X is C and Y is S, or
is O and Y is N, or
is N and Y is N;

m is 1;

R5 is hydrogen, CF_3, $(C_1\text{-}C_6)$-alkyl, or when Y is S, R5 and R6 taken together with the carbon atoms to which they are attached may form a phenyl ring,

R6 is H**[[**,**]]** <u>or</u> $(C_1\text{-}C_4)$-alkyl ~~or phenyl~~;

B is $–CH_2$-, ~~-C2H4-, -C3H6-,~~ <u>or</u> -CO-NH-CH_2- ~~or –CO-CH_2-CH_2-~~;

n is 2 or 3;

Cyc1 is an unsaturated 5- or 6-membered ring, wherein one carbon atom of said ring may be replaced by S;

R7, R8, and R9 are each independently hydrogen, F, Cl, Br, I, $(C_1\text{-}C_6)$-alkyl, $(C_1\text{-}C_4)$-alkoxy~~, S-$(C_1\text{-}C_4)$-alkyl, SCF3~~ or OCF3,

or R8 and R9 taken together form the radicals –C=CH-O- or –CH=CH-CH=CH- and, with the carbon atoms to which they are attached, form an unsaturated or partially saturated 5- or 6-membered ring, said ring being optionally substituted by (C1-C4)-alkoxy.

6. (original) The compound of Claim 1 wherein:

R1 and R2 are each independently F or H,
with the proviso that at least one of said radicals R1 and R2 is F;

R3 is OH;

R4 is OH;

A is O;

X is C and Y is S, or
is N and Y is N;

m is 1;

R5 is hydrogen, CF_3, (C_1-C_6)-alkyl, or when Y is S, R5 and R6 taken together with the carbon atoms to which they are attached may form a phenyl ring,

R6 is H or (C_1-C_4)-alkyl;

B is $–CH_2$- or -CO-NH-CH_2-;

n is 2 or 3;

Cyc1 is phenyl or thiophene;

R7, R8, and R9 are each independently hydrogen or Cl,

or R8 and R9 taken together with the carbon atoms to which they are attached, form a furan ring or a phenyl ring optionally substituted with methoxy.

7. (original) A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.

8. (canceled).

9. (withdrawn) A method of treating type 1or type 2 diabetes which comprises administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

10. (withdrawn) A method of lowering blood glucose which comprises administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1.

11. (withdrawn) A method of treating type 1or type 2 diabetes which comprises administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 with at least one other blood glucose-lowering active ingredient.

12. (withdrawn) A method of lowering blood glucose which comprises administering to a patient in need thereof a therapeutically effective amount of a compound of Claim 1 with at least one other blood glucose-lowering active ingredient.